

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF ALASKA AT ANCHORAGE

ENOCH ADAMS, JR., LEROY ADAMS,)	Case No.
ANDREW KOENIG, JERRY NORTON,)	A04-49 (JWS)
DAVID SWAN and JOSEPH SWAN,)	
)	
Plaintiffs,)	
)	
v.)	
)	
TECK COMINCO ALASKA INCORPORATED,)	
)	
Defendant.)	
)	
NANA REGIONAL CORPORATION AND)	
NORTHWEST ARCTIC BOROUGH,)	
)	
Intervenors-Defendants.)	
)	

DEPOSITION OF MARK THOMPSON

Pages 1 - 252
Thursday, March 3, 2005
11:00 A.M.

Taken by Counsel for Plaintiffs
at
HARTIG RHODES HOGE & LEKISCH
717 K Street
Anchorage, Alaska

Page 202

1 Q. And were you involved in any of the work
2 that was being done to address the TDS issue?
3 A. I've been involved in that work, yes.
4 Q. Could you describe how -- when you first
5 came to work at Teck Cominco, how you became involved
6 in that work and what that entailed?
7 A. You know, when I started, we were operating
8 under a compliance order, which is somewhat unusual,
9 and -- you know, so that made me aware there was
10 issues there. You know, and from there it was okay.
11 You know, as far as I recall, it had always been
12 lined out that this is how the State and EPA wanted
13 to handle this issue, and so this is the way we're
14 going, and let's make it happen.
15 I mean, you know, let's get the
16 site-specific -- let's get the State the data it
17 needs, change the state standard, let's collect the
18 data for the site-specific analysis, let's get the
19 permit modified.
20 Q. When you said this is how the State and EPA
21 want to handle this, what are you talking about,
22 "this"?
23 A. This TDS issue for Red Dog.
24 Q. How do you know that that's what the State
25 and EPA wanted to do?

Page 203

1 With all the meetings and documents that
2 I've been to and looked through, you know, it's -- it
3 was fairly obvious. EPA and the State -- my
4 impression from them was that they weren't willing to
5 pursue other avenues of how -- of how that was going
6 to happen.
7 Q. What's another avenue that they might
8 pursue?
9 A. Pipeline to the port might have been
10 another avenue. Treatment might have been another
11 avenue. I'm sure there was others.
12 Q. They weren't willing to pursue it?
13 A. As far as I can tell. You know, the
14 federal government was not going to let us put a
15 pipeline through Cape Krusenstern National Monument.
16 Q. Did they tell you that?
17 A. They never told me that specifically. As
18 far as I could tell, though --
19 Q. Did they tell Teck Cominco that?
20 A. I can't remember exactly how that
21 information came to me, but it was fairly obvious
22 that it was going to be another -- it was going to
23 take another act of Congress to get that pipeline
24 through there, and maybe that was an internal
25 analysis on our part. I don't recall. But looking

Page 204

1 at how the corridor, port corridor was originally
2 enacted, there wasn't any hope to slide a pipeline
3 through in that corridor. And it took an act of
4 Congress initially to get the road through.
5 Q. How about a pipeline following the
6 Ikalukrok and then the Wulik?
7 A. That would be an issue, but as long as you
8 had an end-of-pipe limit, didn't matter what you were
9 discharging into. And the one-third above background
10 1500 was an end-of-pipe limit. Didn't matter where
11 you discharged.
12 Q. It didn't matter where you discharged? If
13 the background is the ocean?
14 A. Ocean -- that TDS limit was a freshwater
15 aquatic life standard. Wouldn't apply in salt water.
16 Ocean's 33,000 milligrams per liter.
17 Q. Right. That's what I'm saying. So
18 wouldn't you have a different TDS --
19 A. Oh.
20 Q. -- limitation if you discharged into the
21 ocean?
22 A. Reroute it on another route to the ocean?
23 Q. Yeah.
24 A. I'm not sure that was considered.
25 Q. Okay. In addition to the Andrews

Page 205

1 studies -- you know, I'm aware of three different
2 study by Gene Andrews, in '96, '97 and '99.
3 Has Teck Cominco also engaged consultants
4 to look at mine drainage issues?
5 A. Mine drainage issues as far as? What would
6 we be looking at?
7 Q. The contaminants that are draining off.
8 A. Yeah, we've worked with consultants to
9 development TDS load balances, water balances. Been
10 working with consultants on load and water balances
11 since well before I ever got there.
12 Q. And has that resulted in published studies,
13 or is that informal working?
14 A. I don't -- I guess I'm not really sure what
15 you mean by published. We don't put them in the
16 library or anything.
17 Q. Let me rephrase that. Has that resulted in
18 actual physical studies, or is it more informal
19 consultation that's not reduced to paper?
20 A. Oh, I believe there is a few -- a few
21 reports. A lot of the load balance work has just
22 kind of been evolving. Excel spreadsheets and other
23 type model simulators. It's just kind of been
24 ongoing and evolving. It's never -- it's been
25 something that's been very hard to close. We're just

52 (Pages 202 to 205)

Page 206

1 now getting to where we can actually close the
2 balance.

3 Q. What do you mean close the balance?

4 A. Well, we know -- you know, we know how much
5 water we have in the pond, and we know what the
6 concentration of the pond is. There is a load.
7 Okay. We know what we discharge. We have good
8 handles on what we are putting in there. We have
9 good handles on those concentrations.

10 So you can track the load around the whole
11 place, and it wasn't balancing. It was -- it
12 appeared that there was -- I can't even remember
13 which way it wasn't balancing, but there appeared to
14 be more or less load going to the impoundment than
15 what the impoundment actually had. I can't remember
16 which way it wasn't balancing.

17 Q. What consultants have been working on the
18 load balancing issues?

19 A. When I first started, we had SRK in
20 Vancouver. I worked with them for a couple years.
21 Now with the solid waste disposal permit, we have SRK
22 and SENES working on that.

23 Q. Can you spell SENES for us?

24 A. S-E-N-E-S, all caps. I believe the
25 balance -- and I've kind of gotten out of that here

Page 207

1 recently, but I believe that balance is really good.

2 Q. Now?

3 A. Yeah. From what I hear, we've got a pretty
4 good balance.

5 Q. And is that being folded into the
6 wastewater permit? The waste -- I'm not using the
7 right term. What's the -- what's the waste permit
8 that you --

9 A. Solid waste disposal permit?

10 Q. Solid waste disposal permit. Thank you.

11 A. It's being used as a tool to determine
12 long-term closure costs.

13 Q. Have you had any interaction with Gene
14 Andrews?

15 A. First time I ever met Gene was with you in
16 Seattle.

17 Q. Okay. When you are looking at TDS at
18 places other than Outfall 001, how often are you
19 doing actual samples versus conductivity measurements
20 and extrapolation?

21 A. Can you give me an example of what
22 locations you're talking about?

23 Q. How many locations do you report TDS data
24 from in your DMRs?

25 A. All but the -- all but the tributary

Page 208

1 streams.

2 Q. Okay. For all those locations other than
3 Outfall 001, is the data you're reporting based on
4 conductivity measurements or sampling?

5 A. No, any data reported in DMR would be a
6 sample result data for TDS, other than the tables of
7 conductivity and temperature and the attachments for
8 Station 10 and 160. Even the data reported in the
9 DMR tables for Station 10 is actual analytical
10 results.

11 Q. Okay. You mentioned that you were just
12 finishing up on a water balance and found that -- I
13 think you were saying closing the balance. Is that
14 the term you used?

15 A. I used that term.

16 Q. How has the mine's water balance changed
17 over the years that you've been there, if it's
18 changed?

19 A. Well, I think as far as the water balance
20 goes, we've had a fairly decent water balance for a
21 number of years. It was the load balance that we
22 were having trouble closing.

23 Q. Okay. What's the difference between a load
24 balance and a water balance?

25 A. Load balance looks at sources of TDS,

Page 209

1 whereas water balance only -- is only concerned with
2 volumes of water.

3 Q. How has the mine's water balance changed
4 over the time you've been there?

5 A. I can't think of much that has changed. We
6 put in a couple fresh water diversions, but that's a
7 few tens of millions of gallons, not significant.

8 Q. And has the mine's load balance changed
9 since you've been on board?

10 A. I would characterize the load balance as
11 something that is dynamic, whereas the water balance
12 is somewhat static. In other words, we see this
13 increasing trend in TDS in the pond. It's a dynamic
14 situation. It's changing. Water tends -- flows seem
15 to be somewhat uniform percentagewise every year.

16 Q. Can you tell me the status of the
17 reauthorization request for the permit? You said you
18 were hoping to have a draft by summer.

19 A. EPA has changed permit writers on us.
20 We're on our third one. So maybe she'll actually get
21 started on something. So I mean -- and I guess the
22 bottom line to that is it's -- it hasn't really been
23 started.

24 Q. But you expect it to be done by the end of
25 summer?

53 (Pages 206 to 209)